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MULTIPLE STIMULUS REVERSIBLE HYDROGELS**Abstract**

5 A polymeric solution capable of gelling upon exposure to a critical minimum value
of a plurality of environmental stimuli is disclosed. The polymeric solution may be an
aqueous solution utilized *in vivo* and capable of having the gelation reversed if at least one
of the stimuli fall below, or outside the range of, the critical minimum value. The aqueous
polymeric solution can be used either in industrial or pharmaceutical environments. In the
medical environment, the aqueous polymeric solution is provided with either a chemical or
10 radioisotopic therapeutic agent for delivery to a specific body part. The primary advantage
of the process is that exposure to one environmental stimuli alone will not cause gelation,
thereby enabling the therapeutic agent to be conducted through the body for relatively long
distances without gelation occurring.